Department of Water Resources
Division of Planning and Local Assistance
Bulletin 160
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Subject: Backup Materiel Cover Letter

Dear Committee Members and Staff:

I previously delivered to Kamyar an article from the *Journal of the Soil and Water Conservation Society*. It discussed the concerns that I have with global warming effects on water supply and added the effect of catastrophic fire on soil particles ability to hold water. I might paraphrase the effect for clarity by noting that bricks are not created to hold water.

Now I enclose the publication *California Agriculture* published by the University. Its feature articles are on climate change. In addition to the effects on water availability and quality, it notes biodiversity shifts in the wildlands. It has been one of my contentions that this shift will in turn increase the effects of climate change.

I have hypothesized that forest management practices will intensify the effects of climate change. It is probably not an effect to be added to global warming, but will be a multiplier effect on watershed and reservoir capacity and the general environment. Modeling is not my forte, and I would ask the able computor types in the Department to ascertain the severity of the forest impacts. I remain a speed bump on the information highway.

I have put stress on lack of focus on water in the watersheds and on reservoir retrofit as these are factors that can be mitigated. Planning in California can have little impact on tropical deforestation and other factors, but these are two areas that the State and Federal agencies can have positive effects. Two things are necessary to accomplish positive results:

The bureaucratic and political will to act positively with but the proper amount of studies.

The ability to put objections to action in perspective remembering the following two observations:

- o Political correctness arises not from assuredness of being in the right, but rather insecurity in the logic of a position.
- o Biodiversity is often but buzzworddiversity.

Sincerely, Dennis Tol

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A warmer California:

Assessing the impacts or cumate change



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Research articles

COVER STORY: Global climate change will affect air, water in California

The scientific consensus is clear that global warming is under way, but the extent of coming change is still hotly debated.

Contract use widespread in wine grape industry

Goodhue et al.

Growers with more experience, larger vineyards, more expensive wine grapes and longer relationships with buyers were more likely to have contracts.



Avocado thrips: New challenge for growers Hoddle et al.

Following the 1996 arrival of avocado thrips, natural enemies and selective pesticides were identified, and other potential thrips pests and new IPM strategies were developed.



Graft-transmissible agent causes bark necrosis and stem pitting in plum trees Marini, Rowhani, Uyemoto

After two Central Valley plum orchards failed, studies were conducted to characterize the viral disease agent; numerous Prunus species were susceptible.

Sea surface temperature

▲ COVER: A new sensor orbiting the Earth aboard NASA's Terra satellite is collecting the most detailed measurements ever made of the sea's surface temperature.

The Moderate-resolution Imaging Spectro-radiometer (MODIS) is measuring sea surface temperature at twice the accuracy of previous satellites. Taken Jan. 1-8, 2001, this image shows cold water upwelling near the coast of Peru and joining the South Equatorial Current, which flows westward across the Pacific Ocean.

Thermal expansion of seawater and widespread loss of land ice due to global warming have very likely contributed to the documented rise in sea level (1 to 2 millimeters annually) during the 20th century.

Image by Jesse Allen, based on data provided by the MODIS OCEAN Team and the University of Miami Rosenstiel School of Marine and Atmospheric Science Remote Sensing Group.

Continuous page numbering

After consultation with our Associate Editors panel California Agriculture initiated continuous page numbering this year. This change brings us into conformity with a standard practice used by the vast majority of peer-reviewed science journals. We understand that this convention may be unfamiliar to some of our lay audience, and apologize for any inconvenience it may cause: